



The AOC is the lower three miles of the river, and the Green Bay shoreline north of the river mouth to John Henes Park and south of the river mouth past Seagull Bar along Green Bay.

Great Lakes rivers and harbors that have been most severely affected by pollution and habitat loss are considered “Areas of Concern,” or AOCs. Designated in 1987 as part of an international agreement between the U.S. and Canada known as the Great Lakes Water Quality Agreement, these sites need special attention. This fact sheet highlights some of the progress that partners in Wisconsin and Michigan have made toward removing the Lower Menominee River from the list of AOCs.

The Lower Menominee River Great Lakes Area of Concern



Marinette Marine (WDNR)

Historical industrial development and urban land use in the communities of Marinette, WI and Menominee, MI have taken a toll on the Lower Menominee River. The AOC was designated due mainly to contamination of the river bottom by arsenic, coal tar and paint sludge and loss of wetlands along the river.



Seagull Bar (Pete Wolter)

Wisconsin and Michigan share responsibility for the river's rehabilitation, and the states work closely with each other and with local citizens to address the pollution and habitat loss. Local and federal agencies have also been important partners.

AOC Accomplishments

Lloyd Flanders Inc. paid for the removal of 30 million pounds of hazardous waste and contaminated sediment from the Bay in 1995.

Tyco removed 302,000 cubic yards of arsenic-impacted sediments from the Menominee River between 2012 and 2014.

Wisconsin Public Service Corporation oversaw the removal of 15,000 cubic yards of coal tar wastes during 2012 and 2013.

The City of Marinette and WDNR completed removal of failing seawall and 59,000 cubic yards of contaminated and excess sediment from Menekaunee Harbor in 2014.

\$7.8M has been secured through the Great Lakes Restoration Initiative and private sources to move lake sturgeon around two Menominee River Dams as part of the Menominee River Sturgeon Passage Project.

The restrictions on recreational contact beneficial use impairment was removed in 2011.



Boom Landing (WDNR)



Menekaunee Harbor (WDNR)

Highlights from the Lower Menominee River Area of Concern



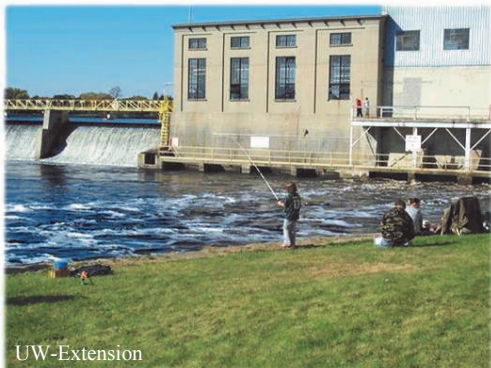
Ansul Arsenic Remediation

From the 1950s through the 1970s, Ansul Inc. (now known as Tyco Fire Products LP) stored arsenic-containing manufacturing byproducts on land adjacent to the Lower Menominee River, contaminating soil, groundwater, and river sediments. Despite efforts since the 1970s to remove arsenic salts and remediate soil and groundwater, the soil and groundwater beneath the site remained contaminated and continued to serve as a source of contamination to the river. In 2010, a barrier wall and groundwater collection system were put in place to prevent further contamination of river sediments, which set the stage for dredging work to occur. Just under 260,000 cubic yards of sediment were dredged from the river in 2012 and 2013. In 2014, a Great Lakes Legacy Act Betterment Project removed another 42,000 cubic yards of sediment down to 20 ppm total arsenic. This will enable the AOC to reach its remedial goals.



Menekaunee Harbor Restoration

After years of planning, the City of Marinette and WDNR, with financial support through the Great Lakes Restoration Initiative, have begun Menekaunee Harbor restoration activities. 2014 activities included removal of the failing seawall and removal of 27,100 cubic yards of contaminated sediment and 31,900 cubic yards of excess sediment. Habitat restoration is expected to be completed in 2015, with follow-up invasive plant monitoring and control through 2020. The City and WDNR share a vision for the harbor that includes better public access, improved economic and recreational opportunities, a cleaner environment, spawning habitat for fish—including northern pike and musky—and improved habitat for amphibians, reptiles, waterfowl, and other wildlife.



Menominee River Fish Passage

Five hydroelectric dams on the Menominee River prevent all lake sturgeon from migrating up the river from Lake Michigan to reach their prime spawning and rearing habitat. Two of the five hydro dams are within the AOC; these serve as the initial barriers to passage and have contributed to the *Loss of Fish and Wildlife Habitat* beneficial use impairment. The Menominee Fish Passage Partnership, comprised of state and federal agencies, nonprofit conservation organizations, and a private energy company, is developing safe and effective ways for lake sturgeon to move around the dams. Fish passage structures at the two dams within the AOC are being constructed with \$6 million in funding from the National Fish and Wildlife Foundation and the U.S. Environmental Protection Agency through the Great Lakes Restoration Initiative. The dams' owner, Eagle Creek Renewable Energy, will contribute nearly \$1.8 million to complete the initial work. They will also be contributing funds to assist state and federal wildlife agencies with operation of the fish passage.



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